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(54) CONTINUOUSLY CONTROLLED SCREW TYPE AIR CONDITIONER

(57) Abstract:

PURPOSE: To aim at a significant improvement in efficiency in time of capacity control operation, by starting a compressor with the partial load (25W33%) operation of a minimum capacity control stage, while making up the compressor so as to continue the operation at an optional position of 100W50% in a continuous control range in time of ordinary operation.

CONSTITUTION: In time of stationary operation, a fact of whether a slide valve 3 is in an upper zone from 100W50% of a capacity control area or in a lower zone 50W25% is detected, and when the former is the case, stageless capacity control operation is to continue as it is, but when the latter is the case, a compressor is stopped. A method of stageless capacity control available in time of existing in the upper zone 100W50% is that an oil drain valve 11 and an oil feed valve 10 are opened at every fixed time interval (normally 0.5W5min) as long as a fixed time (2W6sec) shorter than the said period, and a slide 3 is shifted to an optional position. Doing like this, the stageless capacity control operation takes place whereby the efficient

operation of unloading within a range of 100W50% is made possible.

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